

August 21, 2019

Re: Emerald BioEnergy, LLC Response to Notice of Violation (NOV) NPDES Morrow County 4IN00204

Ms. Betsy L. VanWormer, P.E. Environmental Specialist III Ohio EPA Division of Surface Water

Subject: Response to NOV

Ms. VanWormer,

Please see Renergy's responses below to the NOV sent to us on August 13, 2019. We have also attached additional documents as referenced in the responses below.

1. Violation Description: During the inspection on August 8, 2019, biosolids were found on the surface of the fields in several locations despite the intent to inject the biosolids.

Additional Information: The site authorization issued on July 11, 2019, includes the following special condition: "All biosolids beneficially used at these sites shall be injected beneath the surface of the ground or immediately incorporated into the soil. Biosolids that remain on the surface shall be incorporated within six hours."

Requested Action: Please submit a plan detailing the procedures that will be followed during the land application of biosolids at authorized beneficial use sites to ensure that biosolids do not remain on the field surface when injection or immediate incorporation is required. Please include best management practices in this plan for injecting or incorporating at sites that have a cover crop.

Renergy Response to Requested Action:

Renergy and our contractors go above and beyond to inject and incorporate our liquid fertilizer at all times. Knowing that the head-lands, where the tractor turns around, can be problematic, we take specific measures to revisit each turn site and incorporate via plow. We have always followed industry best practices to fully inject the liquid fertilizer with the best agricultural equipment and methods available.

Multiple Renergy employees as well as OEPA inspectors were on-site at the fields on Blue Church Road to ensure best practices of land application were being followed. In fact, when a Renergy employee asked if our land application was sufficient, an OEPA inspector mentioned we were doing a "great job injecting". Our manager of Soil and Water as well as our Plant Operations Manager and CFO did multiple inspections to ensure we were in compliance throughout the entire application on Blue Church Road. We have photos documenting the field you reference in your NOV as it was being applied that show full injection was achieved



and all rules were being followed. In a follow-up meeting with OEPA Division of Surface Water associates the day of your inspection (Aug 8), it was stated that, "No risk to human health or the environment was found" at the Blue Church Road land application sites.

In response to your requested action, we have updated our Land Application SOP to further detail procedures to be followed by our contractors and will review the document with them in person. We will attach the updated SOP and highlight the additions for your review. Specifically, we have added sections on checking field conditions prior to land application to ensure moisture levels are appropriate and will not result in pooling and reiterated that all land application equipment should be calibrated on a regular basis.

2. Violation Description: The agronomic rate calculations for these sites were not available at the facility when requested on August 9, 2019.

Additional Information: An agronomic rate calculation for Site 21-00215 was performed by Renergy on August 9, 2019. This rate calculation was performed for two crop rotations, therefore, biosolids cannot be land applied again at least until both crops have been harvested.

Requested Action: Please provide the agronomic rate calculations for sites 21-00215 and 21-00216. Please also submit a plan detailing the procedures that will be used to ensure that agronomic rate calculations are performed for each authorized site prior to the beneficial use of biosolids and are provided to the beneficial user for correct application. This plan shall also include procedures to ensure that records requested by Ohio EPA are being maintained at the facility and are readily available.

Renergy Response to NOV / Requested Action:

The agronomic rate calculation for the sites stated above were completed prior to land application by our Soil and Water Manager, Logan Randles. At the time and date of request (8.9.19) Mr. Randles was traveling on a flight and could not be reached to deliver the ARC (Agronomic Rate Calculator) upon request. The ARCs were calculated with all data required from field descriptions, third party soil tests and effluent tests to provide evidence to the OEPA that the correct rates were applied to those fields in question by our contractors. All records requested on land application sites by the OEPA are being maintained and available as detailed below and also included in our Land Application SOP which is also attached. We have also attached copies of our ARC summaries for both fields.

Agronomic rates will be calculated utilizing the OEPA ARC sheets and an ARC summary
provided to contracted operators prior to any land application event by Renergy. ARCs and ARC
summaries will be completed and stored digitally on a cloud based file storage system. The ARC
summary as well as field maps will be supplied to contractors before scheduled land
application.

Sincerely, Ashleigh Lemon

Ashleigh Lemon

Communications and Sustainability Specialist Renergy, Inc.